When Warnings Fail

Use survey data to weigh a flood warning plan.

WG.P.3.1.B "Analyze information from visual, oral, digital, and interactive texts (e.g., maps, charts, images, political cartoons, videos, artwork) in order to draw conclusions and defend arguments."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Circle the battery radio row's count and cell-network entry. Then underline the sentence beginning "The table supports" to connect evidence for a backup method with a limit on what the survey proves.

How Should the Town Send Flood Alerts?

1 Imagine a riverside town testing how to warn people before a flood. Officials ask 100 households whether they received a practice alert sent by three methods on the same afternoon. A household may report receiving more than one alert. The results below count households reached, not how quickly anyone acted or whether every neighborhood was reached.

PRACTICE FLOOD ALERT SURVEY, 100 HOUSEHOLDS

Alert method	Households receiving alert	Uses cell network?
Text message	78	Yes
Battery radio	51	No
Volunteer visit	27	No

2 A text message reached the most households in this test, but it depends on a working cell network and a charged phone. Battery radio and volunteer visits do not need cell service. Visits can be delayed when streets are flooded, while radio reaches only people who turn it on and tune to the station.

3 One council member wants to use texts alone because their count is highest. Another recommends texts plus radio so a cell outage would not cut off both methods. The table supports the second argument about backup methods, but it cannot show how many households received at least one of those two alerts. To learn that, officials need records showing which alerts each household received.

2 ANSWER WITH EVIDENCE

Use the passage

1. Which method reached the most households, and what condition could make it fail during a flood?

2. Which two methods do not need cell service? Identify a different practical limit for each.

3. A council member adds 78 and 51 and claims that texts and radio reached 129 different households. Why is that conclusion invalid?

4. Which proposal is better supported if a flood may disrupt cell service: texts alone or texts plus radio? Use a table value and state one limit of the evidence.

3 YOUR TURN

Your own words

Design a follow-up chart for this town. Name two groups of households it would compare and a measure it would show for each warning method, then use one number from the table to explain how the new chart could affect the town's decision. Do not invent results.

ANSWER KEY

When Warnings Fail

HIGH SCHOOL · WG.P.3.1.B

PART 1 · READ AND MARK

Circle the battery radio row's count and cell-network entry. Then underline the sentence beginning “The table supports” to connect evidence for a backup method with a limit on what the survey proves. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Which method reached the most households, and what condition could make it fail during a flood?	**Text messages reached 78 households. A cell network outage or an uncharged phone could prevent delivery.**
2	Which two methods do not need cell service? Identify a different practical limit for each.	**Battery radio requires people to turn it on and tune to the station. Volunteer visits can be delayed by flooded streets.**
3	A council member adds 78 and 51 and claims that texts and radio reached 129 different households. Why is that conclusion invalid?	**The survey included only 100 households, and some may have received both alerts. Adding the counts would count those households twice.**
4	Which proposal is better supported if a flood may disrupt cell service: texts alone or texts plus radio? Use a table value and state one limit of the evidence.	**Texts plus radio are better supported because radio reached 51 households and does not use the cell network. The table does not show how many households received at least one of the two alerts.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I would compare households in low-lying blocks with households on higher ground. For each group, my chart would show the percentage that received the practice alert by text, battery radio, and volunteer visit. The table says only 27 of 100 households received a volunteer visit, but the new chart could show whether visits reached households in the blocks facing the greatest flood risk.

Accept other defensible comparisons, such as households with and without cell service, if the proposed chart measures alert receipt for both groups. Students should explain how the comparison could inform a decision without claiming results the survey does not provide.